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PENSOFT

First documented record of *Neocrex erythrops* (Sclater, 1816) (Aves, Rallidae) from Rio Grande do Sul, southern Brazil

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Abstract
We present the first documented record of *Neocrex erythrops* (Sclater, 1816) from Rio Grande do Sul, southern Brazil. An adult male was found dead near the campus buildings at the Universidade de Caxias do Sul, Rio Grande do Sul, Brazil. The individual was collected and is vouchered in the zoological collection of the Museu de Ciências Naturais da Universidade de Caixas do Sul. This new record is the first documented occurrence of this species in Rio Grande do Sul.

Key words
Paint-billed Crake; Gruiformes; Rallidae; geographical distribution; Rio Grande do Sul; Caxias do Sul.

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Introduction

Among the 33 genera and 135 species of Rallidae, 1 of the least studied genera is *Neocrex,* with 2 representatives: *N. colombianus* (Bangs, 1898) and *N. erythrops* (Sclater, 1867), which are small-sized birds restricted to the South American (Taylor and Perlo, 1998).

Little is known about *N. colombianus*, which is apparently rare and with scattered records in Colombia, Ecuador and Panama (IUCN 2015). *Neocrex erythrops* has a wider, but irregular, distribution, occurring in Costa Rica, Panama, eastern Colombia, Ecuador including the Galápagos Islands, Venezuela, Peru, Brazil, Bolivia, Paraguay, and Argentina (Camperi 1992, Taylor and Perlo 1998, Watson and Benz 1999, De La Peña 2002, IUCN 2015).

In Brazil, *N. erythrops* is found in the North, Northeast, and parts of the Southeast and Midwest regions, but little is known about it throughout its range. There are documented records in the states of São Paulo (Silva e Silva and Olmos 2007), Minas Gerais, Mato Grosso, Goiás, Bahia, Ceará and Pará (Sick 1997 and Lopes 2012). In Rio Grande do Sul there are no documented records of this species, except for 1 sight record in Osório on the northern coast (Mähler-Jr et al. 2007). The observed characteristics (small body, gray plumage and red color at the base of the beak and front shield) of the Osório make this record reliable, and it is correct to consider that this species occurs in Rio Grande do Sul (Bencke et al. 2010). The records nearest to Rio Grande do Sul are on the Valdes Peninsula and in the city of Santa Fé, both in Argentina (Camperi 1992, De La Peña 2002), about 1000 km away, which also corroborate the acceptance of *Neocrex erythrops* (Bencke et al. 2010), but without concrete documentation occurring in Rio Grande do Sul.

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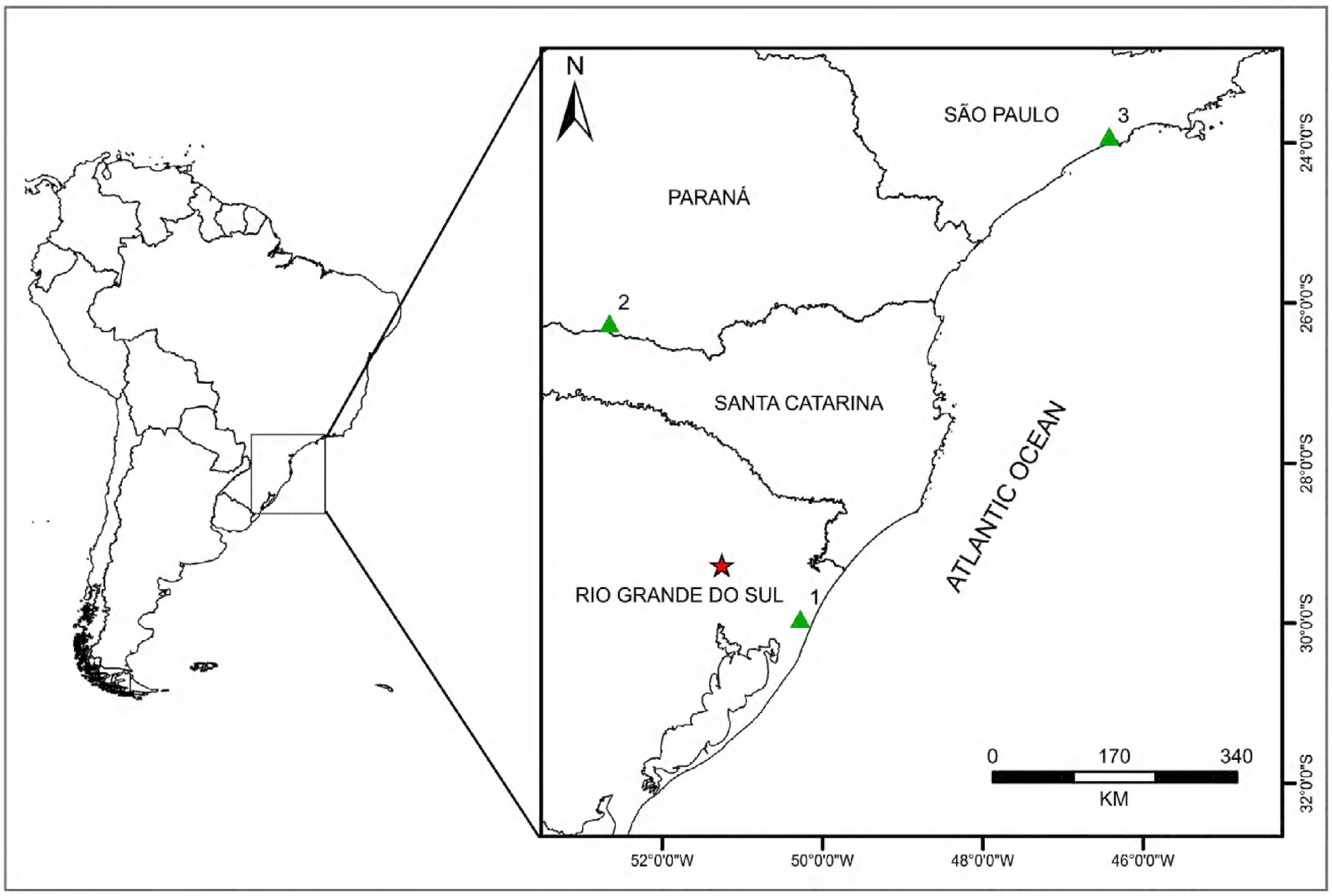

Figure 1. Map of the location of the documented record of *Neocrex erythrops* (Paint-billed Crake) in Rio Grande do Sul, southern Brazil (red star) and other records in southern Brazil (green triangles): 1 = in Rio Grande do Sul (Mähler Jr et al. 2007), 2 = in Paraná (Straube et al. 2004), and 3 = in south São Paulo (Silva and Olmos 2007). Map produced by Darwin Fagundes.

Methods

On 26 June 2012, after a rainy night, we found a deceased *Neocrex erythrops* individual (Fig. 1) near the campus buildings at the University of Caxias do Sul (29°09′45″ S, 051°09’02″ W), where there is a small grove of native and exotic woodlands, located away from wetlands or flooded terrain. This individual was collected, taxidermized and housed in the zoological collection of the Museu de Ciências da Universidade de Caxias do Sul (MUCS-DZ32c6.397c).

Results

This specimen collected did not show any signs of predation; it is an adult male, with a total length of 199 mm and a weight of 58 g. Besides the taxidermized skin, the eyes, syrinx, left testicle, heart muscle tissue, kidney, gizzard and lung were fixed in formalin and the carcass was preserved in alcohol for further analyses. The identification of the specimen was decisive based on descriptions by Taylor (1998). The size was about 20 cm; it had a predominantly olive-brown and grey crown; the nape and entire upper parts were olive-brown; the underwing-coverts were barred brown and white; the lower flanks to undertail-coverts were blackish, barred white with broader white bars on the undertail-coverts; irises were red; the bill was olive-green to pale green with a bright red base and black tip; the legs and feet were red.

Discussion

There is evidence for regular movements, such as migration, including records in certain periods of seasons that indicate some movement of certain populations of Rallidae, and errant records or appearances in unconventional locations, such as urban areas (Remsen and Taylor 1993). Among these unexpected records, there are many observations of individuals that have collided into obstacles such as building windows during night flights, including many dead individuals that are found after rainy nights (Remsen and Traylor 1983, Sick 1996, Taylor 1998, De La Peña 2002, Silva and Olmos 2007). It is believed that the individual of *N. erythrops* found in Caxias do Sul was killed by collision during heavy night rain.

Additionally, there is another record of *N. erythrops* in southern Brazil, from northeastern Paraná (Straube et al. 2004), a male specimen (MHNCI-5469), collected by Alberto Urben-Filho, Douglas Kajiwara and Sérgio A. A. Morato on 29 January 2001 that was found in a small wetland, composed only of *Typha* sp., contiguous to a river at Cachoeirinha, Pato Branco, Paraná (Fernando C. Straube and Alberto Ubern-Filho pers. comm. 2016). A closer documented record was from in southeastern Brazil in the urban area of Santos, São Paulo (Silva and Olmos 2007), which was a female (MZUSP-78734) collected on 26 June 2006. Our specimen collected in Caxias do Sul represents the first documented record of *N. ery-*

Figure 2. Specimen of *Neocrex erythrops* (Paint-billed Crake) collected in Caxias do Sul, RS (MUCS-DZ32c6.397c). Photographs by C. Dalla-Rosa.

throps from the state of Rio Grande do Sul, extending the distribution of this species 120 km to the southeast from the previous record in Rio Grande do Sul (Mähler-Jr et al. 2007), 350 km to the southwest in Paraná (Straube et al. 2004) and 750 km to the south in São Paulo (Silva and Olmos 2007). These rare and important records reveal a lack of occurrence data of *N. erythrops* in southern Brazil. Consequently, more effort is needed to clarify the distribution of this species that may be otherwise overlooked in some regions of southern Brazil.

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Authors' Contributions

ELB and CD collected the specimen; CMJ identified the specimen and performed a taxidermy, CMJ and ELB wrote the manuscript.

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